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TITLE 312 NATURAL RESOURCES COMMISSION

LSA Document #01-106(F)

DIGEST

Amends 312 IAC 13-4-1 and 312 IAC 13-6-2 that governs water well drillers (and the construction, maintenance, and proper abandonment of water wells) to authorize the use of corrugated fiberglass casing in bucket wells. Establishes minimum technical standards for the use of corrugated fiberglass casing. Effective 30 days after filing with the secretary of state.

312 IAC 13-4-1 312 IAC 13-6-2

SECTION 1. 312 IAC 13-4-1 IS AMENDED TO READ AS FOLLOWS:

312 IAC 13-4-1 Casing

Authority: IC 25-39-4-2; IC 25-39-4-9

Affected: IC 25-39

Sec. 1. (a) This section establishes minimum casing requirements.

- (b) A new well shall be equipped with casing having an inside diameter of at least two (2) inches. The inside diameter of the well casing shall allow for easy installation and future removal of the permanent pumping equipment.
- (c) A well must be cased to a depth of at least twenty-five (25) feet below the ground surface unless otherwise approved by the division.
- (d) Casing shall be constructed of a steel or thermoplastic material or a casing specified in subsection (f). Ferrous casing shall be new, first class material that meets the American Society of Testing Materials (ASTM) standards ASTM A-120 (1984) or ASTM A-53 (1987) or American Petroleum Institute (API) standards API-5A or API-5L (1987). Thermoplastic pipe shall comply with ASTM F-480 (1981).
- (e) Casing used under this section must be new. Casing that is salvaged within thirty (30) days of the installation of a well is considered new if the casing is still in new condition.
- (f) Steel, thermoplastic **or NSF certified fiberglass** pipe, or concrete tile shall be used in bucket wells. This casing shall be new material.
- (g) No finished well casing shall be cut below the ground surface except to install a pitless well adapter or as specified in 312 IAC 13-6-2(b)(1) or 312 IAC 13-6-2(c)(2). A pitless adapter must meet the requirements of section 3 of this rule.
- (h) Upon installation, a well casing shall be fitted with a temporary cap that remains in place until pumping equipment or a pitless adapter is installed. The cap shall be a type that prevents vermin or other potential contaminants from entering the well.
- (i) This section does not apply to a monitoring well or a dewatering well. (Natural Resources Commission; 312 IAC 13-4-1; filed Nov 22, 1999, 3:34 p.m.: 23 IR 767; filed Oct 9, 2001, 4:32 p.m.: 25 IR 708)

SECTION 2. 312 IAC 13-6-2 IS AMENDED TO READ AS FOLLOWS:

312 IAC 13-6-2 Bucket wells

Authority: IC 25-39-4-2; IC 25-39-4-9

Affected: IC 25-39

Sec. 2. (a) This section governs the construction of wells by bucket rig drilling methods.

- (b) A bucket well installed as buried slab construction shall conform with the following:
- (1) The well casing shall terminate not less than ten (10) feet below the ground surface. The casing shall meet the requirements contained in 312 IAC 13-4-1 and must be firmly embedded in or connected to a pipe, a minimum of two (2) inches inside diameter, cast in a reinforced buried concrete slab, or attached to a NSF certified fiberglass cap with a watertight mechanical or glued connection. Fiberglass well casing may be slotted below the ground surface to allow for the transmittance of water into the well.
- (2) The annular opening between the well casing and the well bore shall be filled with washed graded gravel from the bottom of the well to the concrete slab **or the fiberglass.** The annular space between the pipe and borehole shall be sealed with concrete or granular, pelletized, or coarse grade crushed bentonite at least six (6) inches thick. The remainder of the borehole shall be filled with clean earth and thoroughly tamped to minimize settling.
- (c) A bucket well installed not using buried slab construction shall conform with the following:
- (1) A well shall have a borehole with an inside diameter at least two (2) inches larger than the outside diameter of the lining or well casing.
- (2) The well shall have a continuous watertight lining of steel or fiberglass casing or concrete extending at least five
- (5) feet below the ground surface. The casing shall meet the requirements contained in 312 IAC 13-4-1. Fiberglass well casing may be slotted below the ground surface to allow for the transmittance of water into the well.
- (3) The annulus between the inside diameter of the borehole and the outside diameter of the well casing shall be filled with washed graded gravel from the bottom of the well to a depth at least five (5) feet below the ground surface. The remaining annulus shall be sealed with neat cement, bentonite slurry, or granular, pelletized, medium grade, or coarse grade crushed bentonite from ground level to at least five (5) feet below ground level.
- (4) A reinforced cover slab at least four (4) inches thick with a diameter larger than the casing or a NSF certified fiberglass cap shall be provided. Vents or pump piping that exits through the slab shall have the pipe sleeves cast in place. Vents or pump piping that exits through the fiberglass cap or casing shall be attached with a watertight mechanical or glued connection. The top of the slab or fiberglass cap shall be sloped to drain to all sides. and A watertight joint shall be made where the slab rests on the well lining using a watertight sealing compound. If a manhole is installed, the manhole shall have a metal curb cast in the concrete slab and extending four (4) inches above the slab. The manhole shall have a watertight cover with the sides to overhang the curb at least two (2) inches. A vent shall be installed in a concrete slab and shall consist of a metal pipe extending above the slab with the open end turned down and at least six (6) inches above the slab. The open end shall be covered with sixteen (16) mesh or finer screen made of durable material. A vent shall be installed in a fiberglass cap or casing and shall consist of a metal or plastic pipe extending at least six (6) inches above the cap or away from the casing with the open end turned down.
- (5) A hole drilled in the **concrete** casing for a below ground discharge line shall be sealed on the inside and outside of the well casing with concrete or a mastic compound. **Fiberglass casing equipped with a below ground discharge line shall have the discharge line attached with a watertight mechanical or glued connection.**
- (6) In a bucket well where casing is used with an inside diameter of less than twelve (12) inches that extends the entire depth of the borehole, the graded gravel filling the annular space between the inside of the borehole and outside of the casing shall terminate not less than ten (10) feet below ground surface. The borehole annulus shall be filled with granular, pelletized, or coarse grade crushed bentonite a minimum of six (6) inches thick and the remainder of the borehole shall be filled with clean earth and thoroughly tamped to minimize settling.
- (d) This section does not apply to any of the following:
- (1) A monitoring well.
- (2) A dewatering well.
- (3) A public water supply well.

The installation of a public water supply well is governed by 327 IAC 8-3.4. (*Natural Resources Commission*; 312 IAC 13-6-2; filed Nov 22, 1999, 3:34 p.m.: 23 IR 768; filed Oct 9, 2001, 4:32 p.m.: 25 IR 709)

Notice of Intent Published: 24 IR 2114

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